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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/709,265

11/09/2000

Willem Van Erk

PHN-17.734

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07/14/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

KEANEY, ELIZABETH MARIE

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/709,265

Applicant(s)

VAN ERK, WILLEM

Examiner

Elizabeth Keaney

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,7 and 10-15 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Receipt is acknowledged of the Amendment and Remarks filed 21 April 2004.

### ***Response to Arguments***

Applicant's arguments filed 21 April 2004 have been fully considered but they are not persuasive. The Applicant argues that Sugimoto et al. (US Patent 5,479,065; hereinafter Sugimoto) cannot be said to make up a filling of mercury, argon gas and further consisting essentially of an alkali metal halide with at least one alkali ion and at least one halide ion.

The Examiner respectfully disagrees. Claims employing the term "consisting essentially of" occupy a middle ground between closed claims that are written in a "consisting of" format and fully open claims that are drafted in a "comprising" format. The term "consisting essentially of" includes the listed ingredients and is open to unlisted ingredients that do not materially affect the basic and novel properties of the invention. (see MPEP 2163). While Sugimoto discloses other additives, they are considered to be known additives in the art that do not materially affect the fill. Therefore, Sugimoto is considered to disclose a filling further consisting essentially of an alkali metal halide with at least one alkali ion and at least one halide ion, the alkali ion being chosen from potassium, rubidium and cesium and the halide ion being chosen from chlorine, bromine and iodine as claimed in claim 1.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4,5,6 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugimoto et al. (US Patent 5,479,065; hereinafter Sugimoto).

Re claims 1 and 4: Sugimoto discloses, in figure 1 and throughout the disclosure, a high-pressure gas discharge lamp comprising:

- a quartz glass lamp (16) which is closed in a gastight manner, with a space which is enclosed by a wall and in which a pair of electrodes (18a,18b) is arranged;
- an outer surface of the wall extending between the pair of electrodes; and
- a filling provided in the space and comprising a rare gas (argon, column 3, line 53), a mercury buffer (column 3, line 53) and halides of tin (Table 1, line 4) and indium (Table 1, line 5),
  - wherein the wall has a wall load of at least  $30 \text{ W/cm}^2$  at its outer surface (column 3, line 45), and in that the filling further consists essentially of an alkali metal halide with at least one alkali ion and at least one halide ion, the alkali ion being chosen from the group formed by potassium, rubidium, and cesium (Table 1, line 3), and the halide ion being chosen from the group formed by chlorine, bromine, and iodine (Table 1).

Re claim 2: Sugimoto discloses the lamp having an arc length of at most 10mm (column 3, line 50).

Re claim 5: Sugimoto discloses, in figure 1 and throughout the disclosure, a reflector in the lamp vessel that is fixed (12).

Re claim 6: Sugimoto discloses the high-pressure gas discharge lamp being a DC lamp (column 3, line 36).

Re claim 16: Sugimoto discloses, in figure 1 and throughout the disclosure, a high-pressure gas discharge lamp comprising:

- a lamp vessel (16) closed in a gastight manner, with a space which is enclosed by a wall;
- a pair of electrodes (18a,18b), the electrodes being arranged in the space and an outer surface of the wall extending between the pair of electrodes;
- a filling provided in the space and comprising a rare gas (argon, column 3, line 53), a mercury buffer gas (column 3, line 53) and halides of tin (Table 1, line 4) and indium (Table 1, line 5),
  - wherein, during the operation of the lamp, the temperature of a major portion of the wall is greater than 800°C (column 1, line 57), and the filling further consists essentially of an alkali metal halide

with at least one alkali ion and at least one halide ion, the alkali ion being chosen from the group formed by potassium, rubidium, and cesium (Table 1, line 3), and the halide ion being chosen from the group formed by chlorine, bromine, and iodine (Table 1).

Regarding the limitation of the wall temperature being greater than 800°C, Sugimoto discloses the wall temperature reaching almost to the melting point of the arc tube. The arc tube is made of silica and silica has a melting point of 1710°C. Therefore, the wall temperature disclosed by Sugimoto would be greater than 800°C.

#### ***Allowable Subject Matter***

Claims 3,7 and 10-15 are allowable over the prior art.

The following is a statement of reasons for the indication of allowable subject matter: The best prior art of record discloses a high-pressure gas discharge lamp having a fill comprising a rare gas, a mercury buffer gas, halides of tin and indium, and an alkali metal halide with the alkali ion being cesium and the halide ion being either chlorine, bromine or iodine. However, the prior art fails to teach or fairly suggest the alkali ion being either potassium or rubidium as claimed in claims 3 and 7. Claims 10-12 and 13-15 would be allowable by virtue of their dependence.

#### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Keaney whose telephone number is (571)272-2489. The examiner can normally be reached on Monday-Thursday 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571)272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2882

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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EDWARD J. GLICK  
SUPERVISORY PATENT EXAMINER